

# ELABORATIONS

News and Issues for Washington's Clinical Laboratories

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## West Nile Virus

by Leonard Kargacin

The following information about West Nile virus is taken from the Washington State Department of Health (DOH) brochure entitled "Do you know what's biting you?" and the DOH *"epiTRENDS"* newsletter (Vol 8, No. 2).

West Nile virus is a serious illness that can affect people, horses, birds, and other animals. In 1999, West Nile virus first appeared in the United States, in New York City. Since that time, it has spread rapidly throughout the country. In 2002, the virus was found for the first time in birds and horses in Washington.

**How is it spread?** West Nile virus is almost always spread to people by the bite of an infected mosquito. Mosquitoes become infected after feeding on birds that carry the virus. West Nile virus is not spread by direct contact with infected people or animals. As more is learned about West Nile virus, other routes of infection may be discovered.

**What are the symptoms?** The incubation period is 3 to 15 days. Most people who are infected with West Nile virus will not get sick. About 1 in 5 people infected will have mild symptoms such as fever, headache, and body aches. Even fewer, about 1 in 150 people infected, will have more severe symptoms that may include headache, high fever, neck stiffness, stupor, disorientation, tremors, convulsions, muscle weakness, paralysis, and coma. People over 50 years of age have the highest risk of serious illness.

**How can you protect yourself?**

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### Avoid Mosquito Bites!

- Make sure windows and doors are "bug tight".
- Stay indoors at dawn and dusk, if possible, when mosquitoes are most active.
- Wear a long-sleeved shirt, long pants, and a hat when going into mosquito-infested areas, such as wetlands or woods.
- Use mosquito repellent when necessary. Repellents that contain DEET are most effective. Check the label for the chemical name for DEET: N,N-diethyl-m-toluamide. Products containing DEET must be used properly. Read and follow instructions on the label. Do not overuse repellents.

### Don't Give Mosquitoes a Home!

- Empty anything that holds standing water – old tires, buckets, plastic covers, flowerpots, and toys.
- Change the water in birdbaths, fountains, wading pools, and animal troughs at least twice a week.
- Recycle unused containers that can collect water –

continued on page 2

## Practice Guidelines

The following practice guidelines have been developed by the Clinical Laboratory Advisory Council. They can be accessed at the following website:  
[www.doh.wa.gov/lqa.htm](http://www.doh.wa.gov/lqa.htm)

Anemia	Lipid Screening
ANA	Point-of-Care Testing
Bioterrorism Event Mgmt	PSA
Bleeding Disorders	Renal Disease
Chlamydia	STD
Diabetes	Thyroid
Group A Strep Pharyngitis	Tuberculosis
Hepatitis	Urinalysis
HIV	Wellness
Intestinal Parasites	

# West Nile Virus, continued from page 1

**Don't give Mosquitoes a Home!** (continued)  
bottles, cans, and buckets.

- Make sure roof gutters drain properly and clean clogged gutters in the spring and fall.
- Fix leaky outdoor faucets and sprinklers.

## Can West Nile virus affect my pets?

West Nile virus can cause serious illness in horses and donkeys. Though most horses do not get sick, about 1 in 3 horses that do get sick will die. To protect your horses, ask your veterinarian about the West Nile virus vaccine for horses. Follow the same steps as above to reduce places where mosquitoes live and breed near horse pastures and barns. It is rare that West Nile virus will cause illness in dogs, cats, and other animals.

## What should I do if I find a dead bird?

West Nile virus infects certain wild birds. Crows, jays, ravens, and magpies tend to become sick and die from infection. Increasing numbers of dead birds may be an indication of West Nile virus in your community. You can help by reporting dead crows and other birds to your local health department, or environmental health program. Look in the phone book under County Government-Health. Certain dead birds will be tested to monitor for West Nile virus.

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NOTE: Letters to the editor may be published unless specified otherwise by the author.

## Website addresses:

**DOH home page:** <http://www.doh.wa.gov>

**LQA home page:** <http://www.doh.wa.gov/lqa.htm>

**PHL home page:**

<http://www.doh.wa.gov/EHSPHL/PHL/default.htm>

While there is no current evidence that one can get West Nile virus from handling dead birds, avoid barehanded contact. Use gloves or double plastic bags to place the carcass in the garbage can.

**Diagnostic Laboratory Testing:** An enzyme-linked immunosorbent assay (ELISA) to detect IgM and IgG antibodies in serum and CSF is available for hospitalized patients through the Washington State Public Health Laboratories (PHL). Testing should be done for any suspected cases with potential exposure to West Nile virus through transfusion, transplant, breast milk, or pregnancy. Serum or CSF should be obtained eight days or more after onset of symptoms. Convalescent serum collected two to four weeks after onset may be requested for additional testing. Testing for West Nile virus, available from commercial laboratories, may be appropriate for diagnosis of mild cases of West Nile virus fever. Local health jurisdictions can help clinicians determine whether testing is indicated and can assist with shipping specimens to the PHL. ELISA assays for West Nile virus may cross-react with antibody from yellow fever and Japanese encephalitis vaccination or from infection caused by St. Louis encephalitis, yellow fever virus, or dengue.

## What are public health agencies doing in Washington State?

State and local health departments:

- Monitor for West Nile virus by trapping and identifying mosquitoes.
- Track the number of dead bird reports.
- Collect specific species of dead birds for laboratory testing.
- Notify health care providers to look for and report symptoms in patients.
- Notify veterinarians to look for and report horses and other animals with signs of West Nile virus.
- Distribute information on the virus and how to control mosquitoes.

These efforts are designed to identify West Nile virus before an outbreak. Public health officials will alert communities about measures that they can take to control West Nile virus.

## West Nile Virus Information Websites

Washington State Department of Health: [www.doh.wa.gov/wnv](http://www.doh.wa.gov/wnv)

Centers for Disease Control and Prevention: [www.cdc.gov/ncidod/dvbid/westnile/index.htm](http://www.cdc.gov/ncidod/dvbid/westnile/index.htm)

Insect Repellent Use and Safety: [www.cdc.gov/ncidod/dvbid/westnile/qa/insect\\_repellent.htm](http://www.cdc.gov/ncidod/dvbid/westnile/qa/insect_repellent.htm)

Outdoor Workers: [www.cdc.gov/niosh/westnileupd.html](http://www.cdc.gov/niosh/westnileupd.html)

Washington State Department of Agriculture: [www.wa.gov/agr/FoodAnimal/AnimalHealth/WNVdefault.htm](http://www.wa.gov/agr/FoodAnimal/AnimalHealth/WNVdefault.htm)

U.S. Department of Agriculture: [www.aphis.usda.gov/lpa/issues/wnv/wnv.html](http://www.aphis.usda.gov/lpa/issues/wnv/wnv.html)

## PHL Training Program Now Online!

by Shelley Lankford

The PHL Training Program is now on the World Wide Web. Our web address is <http://www.doh.wa.gov/EHSPHL/PHL/train.htm>. You can now look at the annual course schedule, find information on the courses listed, class instructors and more. You can also sign up for classes anytime by downloading the registration form for classes in either a PDF or Word format and emailing to the address below or faxing them in to program assistant, Margaret Hoff. We will eventually be going to an online registration format; however, we have a few details to work out first. If you have any suggestions for how we can improve our web site, please let us know by email at [PHL.Training@doh.wa.gov](mailto:PHL.Training@doh.wa.gov).

## We Need Your Help Updating The Shipping Class!

by Shelley Lankford

In the past year the DOH Public Health Laboratories Training Program has presented several Shipping and Handling Biohazardous Materials classes. These classes were full day courses packed with the shipping regulations (including recent changes) how to package diagnostic and infectious specimens for shipping, proper labeling of the containers, class exercises and more.

There were many students who had difficulties getting time away from their busy labs to attend the training. In order to better serve you, the training program is considering reducing the class to half a day or revise the full day class to cover more shipping topics. What we would like to hear from our customers is:

1. What are the key issues that you would like us to focus on if we reformat this class to a half-day class?
2. Or, if you believe we should continue with a full day class, what can we add to the current class that would help you improve the shipping and handling of biohazardous materials in your facility?
3. Please provide any additional suggestions or comments regarding the shipping classes.

We value your input to improve our program services. Please send any shipping class suggestions or comments to the training program at [PHL.Training@doh.wa.gov](mailto:PHL.Training@doh.wa.gov) or you can fax your comments to (206) 361-2904.

## 10th Annual Clinical Laboratory Conference

**November 10, 2003**

**Seattle Marriott SeaTac Hotel**

**Invited speakers: Dennis Weissman, Michael Astion, MD, PhD, Jeff Thompson, MD**

**Mark your calendars**

**Plan to attend today!**

(Registration flyers will be mailed in August)

## Waived Testing Helpful Hints

In the previous issue, we discussed Good Laboratory Practice (GLP) #8: Accurately record results. Here is GLP #9: Sign and date the results.

### What does this mean?

- ✓ The person who performs the patient test should always sign and date the patient test results when they are reported.
- ✓ Sign and date the patient test results whether they are recorded directly in the chart or on a separate test report form.
- ✓ This will document who performed the test and the date the test was performed in case questions arise at a later date.

**NOTE:** Check this spot in future editions of *Elaborations* for more helpful hints with waived testing.

### Calendar of Events

#### PHL Training Classes:

Basic Blood Cell Morphology  
September 11                      Shoreline

Urine Sediments  
October 10                          Shoreline

#### Northwest Medical Laboratory Symposium

October 22-25                      Olympia

#### 10th Annual Clinical Laboratory Conference

November 10                       Seattle

#### WSSCLS/NWSSAMT Spring Meeting

April 2004                          Vancouver

Contact information for the events listed above can be found on page 2. The Calendar of Events is a list of upcoming conferences, deadlines, and other dates of interest to the clinical laboratory community. If you have events that you would like to have included, please mail them to *ELABORATIONS* at the address on page 2. Information must be received at least one month before the scheduled event. The editor reserves the right to make final decisions on inclusion.